A Review of the Genus Creaghiella Stapf. (MELASTOMATACEAE)

by

M. P. Nayar

Central National Herbarium, Botanic Garden,
Howrah

Abstract

A new species of *Creaghiella* is described from Borneo. *Anerincleistus philippinensis* Merr. is transferred to the present genus as *Creaghiella philippinensis* (Merr.) Nayar. A key to the species so far known is also presented.

Introduction

Stapf (in Hook. f. Ic. Pl. 25: t. 2455, 1896) established the genus *Creaghiella* on the basis of the specimen *Creagh* s.n. from Maruda Bay, Sandakan in honour of Creagh, Governor of Sabah. The genus *Creaghiella* is allied to *Anerincleistus* but differs from it in having subequal or unequal stamens with dorsally gibbose and ventrally 2-lobed connective, whereas in *Anerincleistus* the connective is inappendiculate ventrally and minutely spurred or tuberculate.

The three species *C. purpurea* Stapf, *C. setosa* Nayar and *C. philippinensis* (Merr.) Nayar form a homogeneous group, having similar facies with densely setose or tomentose, usually purplish branches, 4-merous flowers, subequal or unequal stamens with dorsally gibbose and ventrally 2-lobed connective.

The purplish branches, leaves and inflorescence give colour to the different species of this genus and this can be introduced as a garden plant. This is an endemic genus with two species (*C. purpurea* Stapf. and *C. setosa* Nayar) in Sabah region of Borneo and a single species *C. philippinensis* (Merr.) Nayar in Palawan Island of Philippines. Palawan Island represents the nearest land-bridge from Borneo to other islands of Philippines. *Creaghiella* is a genus of densely hirsute shrubs growing in creeks and sand dunes near sea-shore.

Key to the species of *Creaghiella*

I. Inflorescence terminal, umbellate.

  II. Calyx tube shaggy tomentose, calyx lobes long; inflorescence axis short, stout; flowers and capsules larger ... *C. purpurea*

  II. Calyx tube shortly setose, calyx lobes short; inflorescence axis long, slender; flowers and capsules smaller ... *C. setosa*

I. Inflorescence axillary, fascicled ... *C. philippinensis*

Enumeration of species

1. **Creaghiella purpurea** Stapf in Hook. f. Ic. Pl. 25: t. 2455, 1896. (*Creagh* s.n. Holotype K.)

Distribution: Endemic to Borneo. Borneo: Sabah, Maruda Bay, Tanjong Batu, Sandakan, 5 May 1895. *Creagh* s.n. (K) Kg. Malanta, alt. 6 m., 30 May 1933 *Olik NBFD 3327* (K, L.); Elopura, Sandakan F.D., alt. 20 m., 18 Dec. 1947, *Kadir NBFD A.672* (K); Ibid., alt. 50 m., 20 Jun. 1949, *Castro NBFD A.478* (K); Ibid., *Kadir NBFD A.944* (K); Elopura, Sandakan, Kabili F.R., *Austin Cuadra NBFD A.515* (K); Ibid., *Keith NBFD 4529* (K, L.); Kabili-seilok F.R., alt. 2 m., 12 Jul. 1937, *Enggoh NBFD 7298* (K, L.) Batu Sapi road, Sandakan, 19 Aug. 1960, *W. Meijer SAN 21542* (K.).

This is a beautiful shrub of 2–4 m. tall with red flowers and pinkish branches and inflorescence.

2. **Creaghiella setosa** Nayar, **sp. nov.** Affinis *C. purpureae* Stapf. sed floribus capsulisque minoribus, lobis calycinis minoribus, calycis tubo minute setoso, pedunculis longioribus tenuibus differt.

Frutex Rami teretes, dense hirsuto-tomentosi. *Folia* ovata, 10–20 cm × 6–13 cm, basi rotunda vel subcordata, apice acuminata, margine denticulata, supra velutino-hispida, subtus hispida, 7-nervia, venulis transversis supra et subtus distinctis, membranacea; petiolus 2–6 cm longus, dense hirsuto-tomentosus. *Inflorescentia* terminalis, 7–15 cm longa, pseudoumbellata, dense hirsuta. *Calycis tubus* campanulatus, 5–5.5 mm longus, dense setosus, setis 0.5 mm longis limbus 4 lobatus, lobis triangularibus, 1–2 mm longis. *Petala* oblonga, 2.5–3 mm × 1–1.5 mm, apice ciliata. *Stamina* 8, subaequalia, filamentis 6–7 mm longis, antheris lanceolatis 6–8 mm longis, apice rostratis, connectivo non producto, antice 2 lobato, postice gibboso. *Ovarium* calycis tubo septis 8 adnatum, coronatum. *Capsula* 4 × 3.5 mm, dense setosa. *Semina* minuta, 0.3–0.4 mm longa, numerosa.

TYPUS: *G. Mikil SAN 31422* (Holotype L.)

Shrub. *Branches* terete, densely hirsute tomentose. *Leaves* ovate, 10–20 cm × 6–16 cm, base rotund or subcordate, apex acuminate, margin denticulate, upper surface velvety hispid, under surface hispid, 7-nerved, transverse venules on the upper and lower surface distinct, membranaceous; petiole 2–6 cm long, densely hirsute tomentose. *Inflorescence* terminal, 7–15 cm long, pseudoumbellate, densely hirsute. *Calyx tube* campanulate, 5–5.5 mm long, densely setose, bristles 0.5 mm long, 4-lobed, lobe triangular, 1–2 mm long. *Petals* oblong, 2.5–3 mm × 1–1.5 mm, apex ciliate. *Stamens* 8, subequal, filament 6–7 mm long, anther lanceolate 6–8 mm long, apex rostrate, connective not produced, connective ventrally 2-lobed and dorsally gibbose. *Ovary* adnate to the calyx tube by 8 septa, disc present. *Capsule* 4 × 3.5 mm, densely setose. *Seeds* minute, 0.3–0.4 mm long, numerous.

Distribution: Borneo: Sabah. Klias, Beaufort Dist., Sept. 1962, *G. Mikil SAN 31422* (L); Beaufort, alt. 66 m., 28 Sept. 1932, *Bakar NBFD 3399* (K, L.); Padas gorge, south side, Tenom Dist., Sept. 1959, *W. Meijer SAN 19827* (K, L.); Pangi, Tenom Dist., alt. 500 m., 5 Sept. 1954, *G. H. S. Wood & Wyatt* Smith *SAN A.4311* (L.).

C. setosa is closely allied to *C. purpurea,* but it is immediately recognisable by its smaller flowers, smaller capsule and short setose hairs in the calyx tube and long slender inflorescence axis and smaller calyx lobes; whereas in *C. purpurea* the flowers and capsule are larger, calyx tube is shaggy tomentose and inflorescence axis is short and robust.

3. **Creaghiella philippinensis** (Merr.) Nayar **comb. nov.**

Anerincleistus philippinensis Merr. in Philipp. Journ. Sc. Bot. 12: 337, 1917. Distributon: Philippines: Palawan, Malampuya, Sept. 1910, *Merrill 7241* (Syntypes K, BM.); Ibid., May 1913, *Merrill 9412* (Lectotype K); Mt. Capoas, Apr. 1913, *Merrill 9552* (Syntype K.).

In the original description it is mentioned that the stamens are dorsally tuberculate and ventrally inappendiculate. On careful scrutiny it is seen that the anthers are dorsally gibbose and ventrally 2-lobate; whereas in the genus *Anerinceistus* the subulate anthers end dorsally in a tubercle and ventrally they are inappendiculate. Besides the nature of floral parts, the nature of its leaves and its habit indicate that this taxon is allied to *Creaghiella purpurea* and *C. setosa* of Sabah, Borneo.

In *C. purpurea* and *C. setosa* the inflorescence is terminal, whereas in this taxon the inflorescence is axillary. But in all the three species the flower buds in juvenile stage are subsessile and the pedicels prominently elongate during anthesis. *C. philippinensis* is allied to *C. purpurea,* but is easily distinguished by its axillary inflorescence, larger petals (1.5 cm × 1.1 cm) and short ventral appendages; whereas in *C. purpurea* the inflorescence is terminal, petals are much smaller (3.5–4 mm × 2 mm) and the ventral appendages are prominent.

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